

In the Claims

Please cancel claim 12. Please amend claims 1-7, and 11. Please add new claims 25-28.

The following listing of the claims replaces all previous listings.

1. (Currently Amended) An administrative module for use in a digital switch, wherein the digital switch includes a plurality of blades coupled to a switching fabric, and wherein each blade outputs serial data streams with in-band control information ~~in multiple stripes to~~ said switching fabric, said administrative module comprising:

a level monitor at a receiving blade that monitors levels of the data received and stored at a the receiving blade; and

a ~~stripe~~ synchronization error detector that detects a ~~stripe~~ synchronization error based on the amount of stored data monitored by said level monitor.

2. (Currently Amended) The administrative module of claim 1, wherein the data received at a receiving blade is sorted based on ~~stripe and~~ source information and stored in a set of data structures, and wherein:

said level monitor monitors the levels of data stored in each data structure of the receiving blade, and

said ~~stripe~~ synchronization error detector detects at least one of an overflow and underflow condition in the amount of stored data received ~~on a respective stripe~~ from a particular source.

3. (Currently Amended) The administrative module of claim 1, further comprising:

a flow controller that initiates a recovery routine to re-synchronize data ~~across the stripes~~ in response to detection of a ~~stripe~~ synchronization error.

4. (Currently Amended) The administrative module of claim 3, wherein said recovery routine includes throttling back the data ~~flowing to one or more of said stripes~~.

5. (Currently Amended) The administrative module of claim 1, further comprising: a control character presence tracker that identifies the presence of a ~~K2~~ character during the recovery routine.

6. (Currently Amended) The administrative module of claim 1, wherein said ~~stripe~~ synchronization error detector detects a ~~stripe~~ synchronization error in response to any one or more of the following error conditions: an incoming link error, a ~~cross-point~~ switching fabric failure, and an outgoing link error.

7. (Currently Amended) A method for detecting ~~stripe~~ synchronization error in a network switch, comprising:

- (a) sorting data received at a receiving slot based on ~~stripe and~~ source information;
- (b) storing the sorted data in a set of data structures at the receiving blade;
- (c) monitoring the levels of data stored in each said data structure; and
- (d) detecting at least one of an overflow and underflow condition in the amount of stored data received ~~on a respective stripe~~ from a particular source.

8. (Original) The method of claim 7, wherein the source information identifies a slot that sent the data across a switching fabric of the network switch.

9. (Original) The method of claim 7, wherein the source information identifies a source packet processor that sent the data from a slot across a switching fabric of the network switch.

10. (Original) A method for maintaining synchronization of striped cell traffic, comprising the steps of:

- (a) sending a common character in striped cells in all lanes for a predetermined number of cycles;
- (b) evaluating the common control characters received at stripe receive synchronization queues; and
- (c) detecting when an in-synch condition is present that indicates the stripe receive synchronization queues have been cleared.

11. (Currently Amended) A method for managing out-of-synchronization traffic flow through a cross-point switch in a switching fabric, comprising:

- (a) monitoring the level of stripe receive synchronization queues, the stripe receive synchronization queues storing data that passed through the switching fabric;
- (b) determining whether an out-of-synchronization condition exists; and
- (c) initiating a re-synchronization routine when said out-of-synchronization condition exists; and further comprising, after said initiating step (c), the steps of:

- (d) sending a common character in striped cells in all lanes for a predetermined number of cycles;
- (e) evaluating the common control characters received at stripe receive synchronization queues; and
- (f) detecting when an in-synch condition is present that indicates the stripe receive synchronization queues have been cleared.

12-24 (canceled).

25. (New) A method in a network switch, the method comprising:

transmitting a plurality of data blocks to a switching fabric of the network switch, wherein each said data block comprises in-band state information, and at least two bytes of packet data, each said data block being transmitted over a respective one of a plurality of first serial links to a respective one of plural switching elements of the switching fabric;

receiving from the switching fabric the plurality of data blocks and storing the data blocks in a data structure, the respective data blocks each having been received from the respective switching element of the switching fabric over a respective one of a plurality of second serial links;

storing the received data blocks according to a source of the respective data block;

detecting an error based on the stored data blocks; and

initiating a recovery routine for the error.

26. (New) The method of claim 25, wherein further comprising identifying whether the error is in a said first serial link, a said second serial link, or the switching fabric depending on the stored data blocks.

27. (New) A method in a network switch, the method comprising:

- receiving from a switching fabric a plurality of data blocks and storing the data blocks in a data structure, the respective data blocks each comprising encoded information and packet data and each having been received from a respective switching element of the switching fabric via a serial link;
- storing the received data blocks according to a source of the respective data block;
- and
- detecting an error based on a quantity of the stored said data blocks.

28. (New) The method of claim 28, further comprising initiating a recovery routine from the error, wherein the recovery routine comprises a flush of the stored said data blocks.